

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 19, line 22 of the Specification with the following:

A1
As described above, once the data acquisition device executes the link nodes in one half of the list as indicated by 904-906 or 912-914, it notifies the host via message link (902/910). The host then updates the executed nodes while the device is parsing nodes from the second half of the list. To prevent overruns, a safety link may be inserted at the end of the linked list in each buffer half (908/916). In the preferred embodiment, if the DMA channel reaches the safety link before the next half of the link chain has been updated by the host, the safety link may stop the DMA channel. It should be noted that this may potentially cause data overflows/underflows on the device DAQ HW. In another embodiment the safety link may pause the DMA channel and let it continue after the host has completed its update. Once the host updates the used half of the linked list, it may turn the safety link into a connection link allowing the DMA channel to continue without interruptions.

Please replace the paragraph beginning at page 20, line 3 of the Specification with the following:

A2
A minimum required size of the link buffer/remote heap for each channel may be calculated from the maximum required transfer rate and an acceptable number of link ~~buffer/remote~~ buffer/remote heap updates each second. If, for example, n updates/s are acceptable and the maximum data rate is N , the minimum remote heap size per DMA channel is

$$Size_{Min} = \frac{2NSize_{Link}}{nD_{linkavg}}$$

A2

For $n = 10$ (one update every 100 ms), $N = 20$ MB/s., $\text{Size}_{\text{link}} = 12$, and
 $D_{\text{avglink}} = 4096$,

$$\text{Size}_{\text{Min}} = \frac{2 * 20 * 1,000,000 * 12}{4096 * 10} = 11,700 \text{ bytes/DMA channel}$$
